# DAYANANDA SAGAR COLLEGE OF ENGINEERING

(An Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE & ISO 9001:2008 Certified) Accredited by National Assessment & Accreditation Council (NAAC) with 'A' grade, Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru-560078s.



# INTERNSHIP REPORT

On

"Intern at insightsoftware"

Submitted in partial fulfillment for the award of degree of

# Bachelor of Engineering In Computer Science and Engineering

Submitted By:

Yash Shah 1DS20CS251

**Eighth Semester B.E (CSE)** 

2023-2024

Department of Computer Science and Engineering Dayananda Sagar College of Engineering Bangalore-78



# **CERTIFICATE**

This is to certify that the Internship work done at "insightsoftware" is being submitted by Yash Shah [1DS20CS251] is the record of the internship carried out by him/her under our supervision. This report is submitted towards the partial fulfillment of Bachelor of Engineering in Computer Science and Engineering during the academic year 2023-2024. It is certified that all the suggestions or corrections indicated for internal assessment have been incorporated in the report. This Internship Report has been approved as it satisfies the academic requirements under the rules prescribed for the Bachelor of Engineering degree.

Signature of HOD

Dr. Ramesh Babu D. R. (Vice Principal & HOD, Dept. of CSE) DSCE, Bengaluru Signature of Principal

Dr. B. G. Prasad (Principal) DSCE,Bengaluru

**Panel Member** 

Name Signature

1.

2.



# **DECLARATION**

I, Yash Shah, student of eighth semester B.E in Computer Science Engineering from Dayananda Sagar College of Engineering declare that the internship entitled "Intern" is a bonafide work carried out at insightsoftware, Hyderabad is a partial fulfillment of academic requirement of Bachelor of Engineering in Computer Science Engineering during the academic year 2023-2024.

Yash Shah B.E. (CSE), 8th Semester (1DS20CS251)

# **ACKNOWLEDGEMENT**

I am content, and grateful for having been provided with this internship opportunity at **insightsoftware**. I take this opportunity to express my deepest gratitude and appreciation to all those who have been helping me directly or indirectly towards the successful completion of this internship.

I would like to thank **Dr. B.G Prasad**, Principal of Dayananda Sagar College of Engineering and **Dr. Ramesh Babu D.R**., Head of Department of the Department of Computer Science

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I would like to thank Michael Sullivan (C.E.O., insightsoftware), and Abhishek Singh (Manager, Engineering, insightsoftware), for giving me an opportunity to be a part of this project, and intern at their company, insightsoftware.

I am grateful to the staff of the Department of Computer Science Engineering for imparting invaluable knowledge and guiding me throughout the duration of my course as a Computer Science Engineering student at Dayananda Sagar College of Engineering.

Yash Shah B.E. (CSE), 8th Semester (1DS20CS251)

# **ABSTRACT**

I am currently interning at insightsoftware as an Intern from Feb 05, 2024. insightsoftware is a leading provider of financial reporting and enterprise performance management software. The company specializes in delivering solutions that help organizations streamline their financial processes, improve decisionmaking, and drive business performance. One key aspect of insightsoftware's work is their commitment to empowering finance professionals with powerful yet easy-to-use tools that enable them to generate accurate financial reports, forecast effectively, and gain actionable insights from their data. By automating and optimizing these critical financial processes, insightsoftware helps organizations save time, reduce errors, and make more informed business decisions. The company has 80 plus different products in the portfolio with over 500k plus users and 300 plus enterprises worldwide. Their products are designed to integrate seamlessly with various ERP (Enterprise Resource Planning) and EPM (Enterprise Performance Management) systems, allowing customers to leverage their existing data infrastructure. Today insightsoftware stands high with annual revenue of more than 500 million USD.

During my internship tenure, I have been assigned to the product named Simba, a pivotal tool within the company's suite of offerings. Simba is renowned for its array of drivers designed to facilitate seamless connections to databases. My primary focus has been on understanding the intricacies of building and utilizing these drivers, essential for database connectivity.

In addition to hands-on learning, I participated in comprehensive training courses aimed at honing my skills. These courses covered a wide range of topics, from the basics to advanced concepts in C++ and Java programming. This training equipped me with the necessary knowledge to navigate the complexities of driver development and database connectivity.

Moreover, I had the opportunity to contribute to a Group Based Sample Application, where we collaborated to build a Hackathon hosting platform. This project provided valuable hands-on experience and allowed me to apply my newly acquired knowledge and skills in a practical setting.

Overall, my internship experience with Simba has been enriching, providing me with valuable insights into database connectivity and driver development. Through hands-on learning, training courses, and practical projects, I have gained valuable skills that will serve me well in my future endeavors.

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# CHAPTER 1 COMPANY PROFILE

## 1. ABOUT THE COMPANY

insightsoftware is a leading provider of financial reporting and enterprise performance management (EPM) solutions, catering to the needs of organizations ranging from small businesses to large enterprises, serving the office of the CFO (Chief Financial Reporting). insightsoftware was born in May 2018 with two companies coming together: Global Software and Hubble, with annual revenue of less than 70 million USD. Since then, the company has acquired an additional 23 companies (and growing). Each year insightsoftware targets the acquisition of 2 to 4 companies. Today insightsoftware stands high with annual revenue of more than 500 million USD.

Their suite of products encompasses a wide range of functionalities designed to enhance financial visibility, streamline processes, and drive informed decision making. One key aspect of insightsoftware's offerings is their focus on financial reporting. They provide tools that simplify the creation and distribution of financial statements, regulatory reports, and management reports. These solutions are not only efficient but also customizable, allowing organizations to tailor reports according to specific requirements and compliance standards.

In addition to reporting, insightsoftware offers comprehensive EPM solutions for budgeting, planning, and forecasting. These tools enable finance teams to create accurate forecasts, model scenarios, and allocate resources effectively. By integrating financial data from disparate sources, these solutions provide a holistic view of performance metrics, empowering businesses to plan strategically and adapt to changing market conditions. Furthermore, insightsoftware excels in data integration and analytics. Their products facilitate the seamless integration of financial data from various ERP (Enterprise Resource Planning) systems, databases, and applications. This integrated approach eliminates manual data entry and ensures data accuracy, enabling organizations to focus on analysis rather than data manipulation.

What distinguishes insightsoftware is their commitment to usability and customer satisfaction. Their software is designed with intuitive interfaces and user-friendly features, making complex financial tasks accessible to users with varying levels of expertise. This customer-centric approach is complemented by a dedicated support team that assists clients with implementation, training, and ongoing optimization. The impact of insightsoftware's solutions extends across industries such as manufacturing, healthcare, retail, and financial services. By leveraging these tools, organizations can optimize financial processes, improve operational efficiency, and achieve greater visibility into their performance metrics.

Overall, insightsoftware empowers businesses to harness the power of their financial data, enabling them to make data-driven decisions that propel growth and competitiveness in today's dynamic business environment. With a comprehensive suite of innovative solutions and a commitment to customer success,

insightsoftware continues to be a trusted partner for organizations seeking to transform their financial operations.

## 2. SERVICES AND PRODUCTS

insightsoftware offers a range of services and products for financial planning and analysis (FP&A), accounting, and operations, transforming how teams operate, empowering leaders to make timely and informed decisions. insightsoftware enables automated processes, delivers trusted insights, boosts predictability, and increases productivity. Here are some of the key offerings provided by the company:

- 1) <u>Budgeting & Planning</u>: Budgeting and planning solutions help you to streamline and automate processes, improve data quality and visibility, while enhancing your decision-making and performance. Some of the products are Bizview and Calumo.
- 2) <u>Tax & Compliance</u>: Tax and compliance solutions help your team to optimize tax and compliance management with faster processing and a single source of truth. Some of the products are Certent DM and Longview Tax.
- 3) <u>Financial Reporting</u>: Financial reporting solutions help finance professionals access and analyze ERP data more efficiently and accurately to provide strategic guidance to their organization. Some of the products are Atlas and Jet Reports.
- 4) <u>Embedded Analytics</u>: Embedded analytics solutions enable ISVs to deliver better insights, efficiency, and user satisfaction to their customers by integrating data-driven features into their applications. Some of the products are Logi Symphony and Process Runner.
- 5) <u>Automation and Data Management</u>: Automation and data management solutions help speed up processes, consolidate multiple data sources, and manage the data that helps your business stay competitive and agile. One of the products is SAP Solution Extensions for Central Finance.

#### 3. PARTNERS

- Reseller Partners: Reseller channel markets, sells, supports, and contracts with end users.

- <u>ERP Partners</u>: Software publishers market, sell, support, and contract with end users.
- <u>Strategic Partners</u>: Ecosystem partners refer, influence, and implement software solutions.
- Other Partners: Oracle, Microsoft, SAP, NetSuite, MRI Software, Oracle EBS, Dynamics 365 Business Central and over 140+ ERP and EPM systems.

# **CHAPTER 2 SYSTEM REQUIREMENTS**

# 1. HARDWARE REQUIREMENTS

Workstation: Dell Latitude

Chipset: Intel

Processor: 12th Gen Intel(R) Core(TM) i7-1255U 1.70 GHz

RAM: 32 GB

Monitors: Dell Dual Monitors 27 inches

Architecture: 64-bit operating system, x64-based processor

# 2. SOFTWARE REQUIREMENTS

Operating System: Windows

Edition: 11 Enterprise

Version: 23H2

IDE: Microsoft Visual Studio

Applications: Google Chrome, Microsoft Edge, SQL Server Management Studio, .NET bundle,

Powershell, Git

# CHAPTER 3 PROJECT WORK

#### 1. PROBLEM STATEMENT

During my internship at insightsoftware, I had the opportunity to contribute to the development of two significant projects.

## 1. Hackathon Hosting Application using the .NET Framework:

- As part of a team of four interns, I focused on designing and implementing the Data Models required for the application, ensuring adherence to Relational Database Management System standards.
- Utilizing the code-first approach of the .NET framework, I efficiently managed database changes and pushed updates to the server using migrations.
- Leveraging the MVC (Models-Views-Controller) architecture, I played a pivotal role in developing the application, ensuring a structured and scalable design.

#### 2. Building Drivers and Database Connectivity Training:

- Throughout my internship, I received comprehensive training in C++ and Java, ranging from basic to advanced concepts.
- This training included in-depth instruction on driver training and the process of building drivers, as well as practical exercises in connecting to databases, such as SQL Server.
- Additionally, I gained proficiency in using tools like ODBC Administrator for testing and debugging purposes.

These projects provided me with invaluable hands-on experience and a comprehensive understanding of various technologies, preparing me for future endeavors in software development and beyond.

#### 2. TECHNOLOGIES USED

The main technology stack used in my internship involved the following:

1. Frontend: ReactJS

2. Backend: C++, C#, Java, .NET Entity Framework

3. Version Control: Perforce

4. Database: Microsoft SQL

5. Others: ODBC Administrator Tool, Registry Editor

# 3. TRANING

Initially, we had our training sessions on the topics relevant to the software development like scaling web application, relational database design, agile methodologies like Scrum, cloud infrastructure, etc. conducted by the managers and senior experienced employees. The sessions were very interactive which broadened my knowledge about the practical uses of the theoretical knowledge. We were given the overview of all the products in the company's portfolio and their categories like financial planning and reporting, tax and compliance, embedded analytics and more.

On completion of these training sessions, we were given the learning modules on C# and .NET framework depending on our product alignment. I learnt about various architectures like MVC (Model-ViewController) of the .NET framework and the various database techniques — code first and database first. Upon completing these modules, we were given a team project to build using the mentioned technologies. My team created a Hackathon Hosting website for the internal use of the company where they could host and manage the hackathons.

I am currently immersed in the exploration of Simba product functionalities, leveraging a plethora of training materials predominantly consisting of videos. These resources extensively cover topics such as C++, Java, and driver training, wherein we delve into the process of building drivers and utilizing them to establish connections with databases like SQL Server. This hands-on experience with C++ code has significantly augmented my practical knowledge. In addition to video resources, knowledge transfer

sessions further enrich my understanding of the Simba product, ensuring a comprehensive grasp of its intricacies and functionalities.

#### 4. RESULT

The following points summarize the outcomes of my ongoing internship at insightsoftware as an Intern:

# • Gained knowledge about various aspects of software development:

- Learned about essential concepts such as database connectivity, data access, and driver development, with a focus on utilizing Simba's drivers like ODBC and JDBC for seamless database connections.
- Explored the intricacies of C++ and Java programming languages, particularly in the context of building drivers and enhancing database connectivity.
- Participated in training sessions aimed at deepening my understanding of ODBC Administrator Tool, SQL Server databases, and utilizing ODBC APIs for efficient database access using C++.

#### • Familiarization with Simba Product:

- Engaged in comprehensive training and product familiarization sessions centered around Simba, a vital tool in facilitating database connectivity and data access.
- Explored the functionalities of Simba drivers, understanding their role in connecting to various databases and accessing data effectively.
- Participated in product demos and Knowledge Transfer (KT) sessions to gain practical insights into Simba's capabilities and applications in database connectivity.

#### • Hands-on Development Experience:

- Worked on practical projects aimed at enhancing my skills in database connectivity and driver development.
- Collaborated on building a Group Based Sample Application, focusing on developing a robust Hackathon hosting platform using Simba's drivers and database connectivity features.

Throughout my internship journey, I have gained valuable insights and hands-on experience in software development, particularly in the realm of database connectivity and driver development using Simba's powerful tools and technologies.

# **CONCLUSION**

My internship experience at insightsoftware has truly been a journey of growth and discovery. From the very beginning, I found myself immersed in a culture of innovation and collaboration, surrounded by mentors, managers, and colleagues who were dedicated to my development. Their unwavering support and guidance have been the cornerstone of my progress, allowing me to navigate challenges and expand my skill set in ways I never imagined.

Working with product Simba has been an eye-opening experience, providing me with exposure to cutting-edge technologies like C++ and Java. The challenges I encountered along the way pushed me to think creatively and problem-solve effectively, honing my abilities as a software developer. Moreover, the collaborative nature of the insightsoftware environment fostered an atmosphere of continuous learning, where each interaction served as an opportunity to gain new insights and perspectives.

Looking ahead, I am eager to continue refining my skills and contributing to the innovative projects that define insightsoftware. The prospect of further growth within this dynamic environment fills me with excitement and motivation. I am confident that the knowledge and connections I have acquired during my internship will serve as a solid foundation for my future career endeavors, empowering me to tackle new challenges with confidence and enthusiasm.

As I reflect on my time at insightsoftware, I am filled with gratitude for the invaluable experiences and relationships I have gained. Each moment spent here has been instrumental in shaping me not only as a professional but also as an individual. I am deeply thankful for the opportunity to be part of this incredible team and look forward to carrying the lessons learned here with me on my journey forward.

In conclusion, my internship at insightsoftware has been a transformative chapter of personal and professional growth. I am immensely grateful for the opportunity and excited to see where this experience will take me in the future.

# **REFERENCES**

- insightsoftware website <a href="https://insightsoftware.com/">https://insightsoftware.com/</a>
- Simba <a href="https://insightsoftware.com/simba/">https://insightsoftware.com/simba/</a>
- Introduction to ODBC https://insightsoftware.com/blog/what-is-odbc/
- Insightsoftware resources <a href="https://insightsoftware.com/blog/category/articles/">https://insightsoftware.com/blog/category/articles/</a>
- Simba SDK https://insightsoftware.com/drivers/simba-sdk/